

DEPARTMENT OF ENERGY
Bonneville Power Administration

Tanner Electric Transmission Line Project

Finding of No Significant Impact (FONSI) and Floodplain Statement of Findings

Summary: Bonneville Power Administration (BPA) proposes to construct 7 kilometers (4.5 miles) of new 115-kilovolt (kV) transmission line in King County, Washington, which would supply a new substation to be built by its customer, Tanner Electric Cooperative (Tanner). BPA has prepared an Environmental Assessment (EA) (DOE/EA-1328) evaluating the proposed project. Based on the analysis in the EA, BPA has determined that the proposed action is not a major federal action significantly affecting the quality of the human environment, within the meaning of the National Environmental Policy Act (NEPA) of 1969. Therefore, the preparation of an Environmental Impact Statement (EIS) is not required, and BPA is issuing this FONSI.

Copies: For copies of this FONSI or the EA (which contains the FONSI), please call BPA's toll-free document request line: 800-622-4520. It is also available on the internet at www.efw.bpa.gov.

For further information, contact: Gene Lynard, KECN-4, Bonneville Power Administration, P.O. Box 3621, Portland, Oregon, 97208-3621, phone number 503-230-3790, fax number 503-230-5699, e-mail gplynard@bpa.gov.

Supplementary information: BPA proposes to construct 7 kilometers (4.5 miles) of new 115-kV transmission line in unincorporated King County and in the City of North Bend, Washington. As a connected action, Tanner would construct a 115/12.5-kV substation in the City of North Bend, Washington, which would receive power from BPA's proposed transmission line. BPA is responding to the need to supply reliable electricity to meet current and future loads of its full requirements customer, Tanner.

Local government planning agencies, as well as individual citizens, are strongly interested in the project. Concerns have primarily focused on the visual impacts that would be related to clearing of trees and other vegetation. Specific areas of concern include locations along SE 356th Avenue, adjacent to the Snoqualmie Ridge Business Park, within the I-90 right-of-way (a National Scenic Byway), and along North Bend Way. These concerns led to consideration of a number of different route segments during development of alternatives and to modification of line locations throughout the planning phase.

Two major alternative plans were identified and are addressed in the EA (Chapter 2). Briefly, they are as follows:

- **Proposed Action:** BPA would construct a new 7-kilometer (4.5-mile), 115-kV single-circuit electric power transmission line in unincorporated King County and in the City of North Bend, Washington, to be energized in the fall of 2001. As a connected action, Tanner would construct a 115-kV/12.5-kV substation in North Bend, Washington, which would be supplied by the new line. The new line would tap Puget Sound Energy's (Puget's) Snoqualmie-Lake Tradition No. 1 transmission line and would be supported on a combination of single wood pole structures and H-frame wood pole structures that could accommodate a Puget distribution line, if necessary.
- **No Action Alternative:** BPA would not construct the new transmission line. It is likely, however, that another entity, probably Puget, would do so, because the need to supply growing electrical loads in the area would still exist. If another entity were to build the line, the impacts of the No Action Alternative might be similar to the proposal in nature and intensity. However, if no facilities were constructed, impacts would be limited to the socioeconomic effects of not supplying electricity demands, including deteriorating service to electricity customers.

In addition, eight route variations and a proposal to place a portion of the line underground were considered and eliminated for a variety of reasons, including costs and/or environmental impacts that were higher than the proposed action. Table 2 in the EA summarizes the impacts of the proposed action.

BPA has determined, based on the context and intensity of these impacts, that with mitigation, they are not significant, using the definition of this concept in Section 1508.27 of the Council on Environmental Quality Regulations for implementing the National Environmental Policy Act. This determination is based on the following discussion of each point listed in Section 1508.27:

1. The project would benefit electrical customers in the area by meeting the short-term needs of Tanner and the long-term needs of both Tanner and Puget. The project would also benefit the environment by providing one set of facilities (one transmission line, one substation, and one distribution line) that meet the customer service needs of three utilities in the area, an example of one-utility planning. In doing so, the views from some residences and roads will change noticeably, but the effects would be mitigated below the level of significance.
2. Implementation of the proposed action would not affect the health and safety of the people of the North Bend/Snoqualmie area. As documented in Sections 3.11, 4.5.2, and 4.5.3 of the EA, the transmission line and substation would be constructed in accordance with the National Electrical Safety Code and state and local safety requirements. Section 3.11 demonstrates that the project would not significantly increase exposure or health risk from electric or magnetic fields.
3. The proposed transmission line and substation would cross or be in environmentally sensitive areas, including wetlands and a National Scenic Byway. Specifically:

a. The new transmission line would parallel I-90, designated a National Scenic Byway, for 1 kilometer (0.6 mile) (EA, Section 3.8.2). The line would create low to moderate impacts to those travelling on I-90, depending on viewer sensitivities. The line would not become the dominant view to either eastbound or westbound motorists: the dominant views in both directions are of mountains and foothills. The following factors also would limit visual impacts to I-90 motorists:

- the line's relatively small size (115-kV);
- the line's limited length within the highway right-of-way (1 kilometer [0.6 mile]);
- the use of natural materials (wood poles) in a single-pole design;
- the relative speed of viewers (60-70 miles per hour);
- the curvilinear shape of the freeway in this area;
- the vegetative buffer between the line and the highway; and
- the planting of trees and other vegetation to screen the right-of-way from public view.

Therefore, the impacts to the National Scenic Byway would not be significant.

b. The new transmission line would cross a number of small wetlands and one large one (EA, Section 3.6.2). Until project design is finalized, the exact locations of transmission structures and access roads are unknown. However, most wetlands crossed are narrow and will be spanned where practical. Impacts would be related primarily to removal of tall trees from wetlands and associated buffers. Any vegetation that would need to be removed would be left in the sensitive area as wildlife habitat. Should any access roads be constructed in wetlands, BPA would acquire the necessary permits through the U.S. Army Corps of Engineers. Best management practices would be used to prevent erosion and runoff and to avoid adversely affecting the wetlands and their resources.

The proposed alignment bisects the large palustrine scrub-shrub and forested wetland associated with Kimball Creek for about 0.8 kilometer (0.5 mile). However, the line would be located on existing fill within the North Bend Way right-of-way, which already bisects the wetland, and no structures would be placed in the wetland. Impact would be limited to removal of a few tall trees from the wetland to maintain line safety and reliability. Because existing access is in place, no new roads would be constructed in the wetland. Therefore, impacts to this wetland would result in no net loss of wetlands and would not be significant.

The actions proposed would not affect other unique characteristics of the geographic area, such as wild and scenic rivers, prime farmland, or park lands,

as there are none present in the immediate project vicinity. Although there is a cultural resource within the project area, the Seattle Lake Shore and Eastern Railway (owned and operated by the Snoqualmie Valley Railroad), the proposed action would not compromise its present use for tourism nor adversely affect the railroad as a potential National Register-eligible cultural resource.

4. There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal. Although interest in the proposed project has been high from its inception, BPA has addressed all of the comments received during the 30-day review period of the Preliminary EA, and has made revisions to the document where necessary. Included in the comments received were comments from King County and the cities of North Bend and Snoqualmie; however, no comments were received from the State of Washington. During the 30-day comment period on the Preliminary EA, BPA held an open house in the City of North Bend. The BPA project team and representatives of Tanner Electric and Puget Power attended to address any concerns, provide information, and to take input that would be addressed in the Final EA. Nine people attended the open house.
5. The impacts of the proposed action are not significant due to the degree of highly uncertain, unique, or unknown risks. BPA has been constructing transmission lines since the 1930s. The project design is not unique, so it would not create unique risks. The impacts of the new line and corridor can be predicted with a high degree of certainty. While recommending continued research into the health effects of magnetic fields, prominent scientific authorities, including the National Academy of Sciences and the National Institute of Environmental Health Sciences, have concluded that: "The data at different biological complexities taken in total do not provide convincing evidence that electric and magnetic fields [EMF] experienced in residential environments are carcinogenic" and that while EMF exposure "cannot be recognized as entirely safe," the evidence for risk to cancer and other diseases was "weak" and the probability that EMF exposure is a health hazard is "small" and "...insufficient to warrant aggressive regulatory concerns." In any event, the project either would not increase electromagnetic fields for some segments, or would not increase exposures because no residences or other occupied buildings would be close enough to experience the increased levels (EA, Section 3.11.2).
6. The actions proposed are not related to other actions with individually insignificant but cumulatively significant impacts, nor would they establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration. The only future action that depends on this one is Puget's potential underbuild of a distribution line on the new poles proposed for this project. However, the EA included an assessment of the effects of that potential underbuild, including the visual effects and changes to

electromagnetic fields. Therefore, BPA's determination of no significant impact includes the impacts of the potential future underbuild.

7. There are no sites listed on or eligible for the National Register of Historic Places at or near any facility location. Although the Snoqualmie Valley Railroad right-of-way may be eligible for listing due to its age, the proposed transmission line would not adversely affect the facility as a potential National Register-eligible cultural resource. The State Historic Preservation Officer concurs with this determination (EA, Section 3.10.2).
8. No federally listed threatened or endangered plants fall within any of the four townships within which the project is located (EA, Section 3.5.1) and no fish or wildlife species listed under the Endangered Species Act, or their critical habitats, are found within 3 kilometers (2 miles) of the project area, so none would be affected (EA, Section 3.7.1).
9. The actions proposed would not threaten to violate federal, state, or local law or requirements imposed for the protection of the environment. The following permit *may* be required and will be obtained, as needed: Clean Water Act Section 404 permit (U.S. Army Corps of Engineers). Final determinations regarding the need for permits will be made after project participants complete final design.

Floodplain Statement of Findings: This is a Floodplain Statement of Findings prepared in accordance with 10 C.F.R. Part 1022. A Notice of Floodplain and Wetlands Involvement was published in the Federal Register on February 24, 2000, and impacts to floodplains and wetlands were assessed in the EA (Section 3.6). The proposed route crosses the 100-year floodplain adjacent to Kimball Creek, where it would be located on existing fill. Though no structures are proposed to be placed within the 100-year floodplain, if any were, they would be designed to withstand flooding, not impede expected flows, and prevent accumulation of flood debris. The project would not increase the chance of flooding or flood-related damage. Though several route variations were considered, lower-impact, reasonable-cost alternatives that would avoid the floodplain were not found.

Although the substation itself would be outside the 100-year floodplain, construction for footings would remove relatively porous soil below the 100-year flood elevation and replace it with less porous concrete footings and gravel. Because of the fill that would be placed below the flood elevation, Tanner is required to compensate for the resulting loss of water storage capacity on a one-for-one basis. To satisfy this requirement, Tanner will remove soil over an area approximately 46 meters (150 feet) by 44 meters (145 feet) by 26 centimeters (13 inches) deep, yielding a volume of soil totaling 667 cubic meters (873 cubic yards). The amount of material removed by the excavation would make up for the storage capacity lost by substation construction. The excavated soil will be placed outside of the floodplain to avoid additional impacts. Increases in run-off and streamflows due to project clearing and access road construction are expected to be

minor. Overall, the proposed project would not adversely affect human life, property, or natural floodplain values.

The actions proposed would conform to applicable state and local floodplain protection standards. Although the proposed transmission line would cross the 100-year floodplain of Kimball Creek, the transmission line would be within the North Bend Way right-of-way, above the base flood elevation of the 100-year floodplain.

The steps to be taken to avoid or minimize potential harm to or within the affected floodplains include:

- In sensitive areas, disturbed land would be restored as closely as possible to pre-project contours and replanted with native and local species.
- Transmission poles will be placed to avoid impacts to wetlands and floodplains. Wetlands would be spanned where practical.
- Best management practices would be employed to control erosion and run-off and to avoid adversely affecting floodplains.
- Manual methods would be employed to remove trees or vegetation determined to be a hazard to transmission line safety and reliability.
- At the substation site, Tanner would remove soil from below the base flood elevation associated with Gardiner Creek. Tanner would deposit the excavated soil in uplands.

BPA will endeavor to allow 15 days of public review after publication of this statement of findings before implementing the selected alternative.

Determination: Based on the information in the EA, as summarized here, BPA determines that the actions proposed, as described and analyzed, are not major federal actions significantly affecting the quality of the human environment within the meaning of NEPA, 42 U.S.C. 4321 *et seq.* Therefore, an environmental impact statement will not be prepared, and BPA is issuing this FONSI.

Issued in Portland, Oregon, on August 15, 2000.

/s/ Alexandra B. Smith
Alexandra B. Smith
Vice President
Environment, Fish and Wildlife